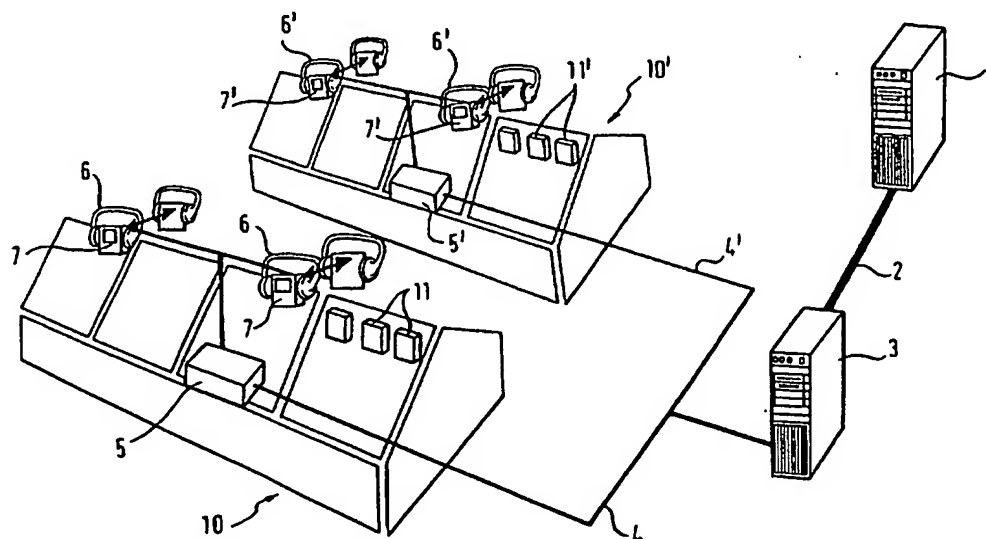


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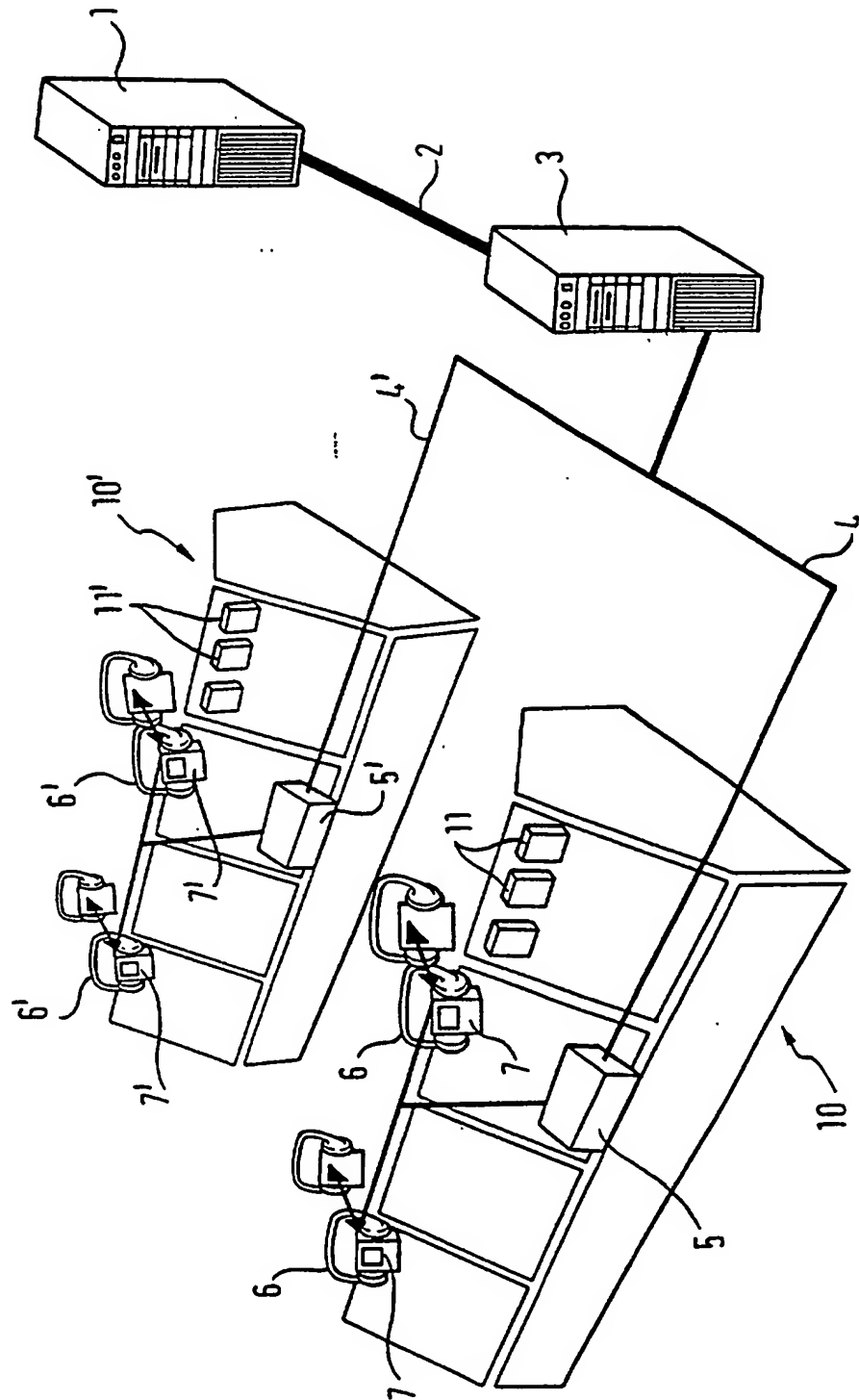
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(57) A system for replay, in particular of extracts, of contents of audio or video recordings (11, 11') is provided. The system comprises a local databank (3) in which the replayable contents are stored as data, and can be addressed and managed according to the tracks of the recordings (11, 11'); at least one peripheral device (5, 5') which is connected on the one hand to the local databank (3) and on the other hand to at least one acoustic and/or optical visual replay means (6, 6'), and to a barcode reader (7, 7') assigned thereto; and a track management program which assigns a barcode, located on the package of the recording (11, 11') and which identifies said recording, to the corresponding data in the local databank (3), and after reading the barcode, controls the replay of the contents of this data via the replay means (6, 6'). The system is characterised in that the local databank (3) is connected to a central databank (1), which supplies the data concerning the replayable contents to the local databank (3).



GB 2 353 135 A



**SYSTEM FOR REPLAYING CONTENTS OF AUDIO
OR VIDEO RECORDINGS**

5 The invention relates to a system for replaying, in particular extracts, of audio or video recordings.

 Often, a customer who wants to acquire an audio or video recording, for example, an audio CD or a DVD, wishes to hear or see a sample of it before buying. This possibility is offered to the customer by a system known from WO 98/25364 with a local data bank in which the contents of the recordings are stored, with at least one
10 peripheral device which also includes a replay means, and a barcode reader assigned thereto, and with a management program which, after reading the barcode on the packaging of a recording, controls the replay of the contents of the local databank belonging to this recording via the replay means. Devices for input and output of additional data, control commands and information can also be connected to the
15 peripheral device so, for example, a forward/rewind function, changing of the replay volume, and the provision of additional information, such as, the title, the name of the artist, the selling price and the like can be given, provided that the databank, the management program and optionally other software, support these functions. The known system is customer-friendly, but has the disadvantage that the operator, that is
20 to say generally the dealer or salesperson, must load, and continuously update, the local databank according to the recordings currently kept in stock for sale.

 At least when there is a rapidly changing selection on offer, as is the case with light music and particularly pop, this upkeep of the local databank proves extremely time consuming.

25 The object of the invention is therefore to provide a system which provides the same facilities as the known system to the end user (customer or buyer), but is much more convenient for the operator (dealer or salesperson).

 This object is solved according to the invention by means of a system with the features described in claim 1.

30 At the heart of the solution is the connection of the local databank to a central databank that supplies the data concerning replayable contents to the local databank. The central databank, that is to say the operators thereof, can thus, either continuously

or at regular intervals, for example, at night, update and service the local databank by remote data transfer. In this way, the dealer or salesperson operating the system in his stores receives convenient sales assistance, which, after acquisition and installation, requires practically no further local upkeep.

5 This concept is naturally particularly economical when numerous systems of the same kind, at different dealers, are connected to the central databank, as the central databank costs and the servicing thereof are then spread over a correspondingly large number of dealers. At the same time, each dealer can provide the central databank operator with a user profile corresponding to his range of recordings or types of
10 recordings. This prevents the local databank being loaded with data of recordings that are not actually for sale in the shop concerned, wherein these data would not be retrieved as the corresponding barcodes could not be input. Accordingly, the storage capacity of the local databank does not have to be excessively large.

 The central databank can also be used in other ways, namely for on-line
15 retrieval of data assigned to the recordings, the barcodes of which have currently been input by the customer or buyer. Another possibility is to use the memory location of the local databank as a cache, and only keep data of the recordings frequently retrieved locally available, whereas the data concerning recordings seldom requested is retrieved on-line from the central databank. For example, 50,000 pieces of music are stored in
20 the central databank, of which 2,000 are filed in the local databank, and the remainder can be loaded, as required, on-line. In the central databank, storage areas can also be allocated individually to operators of local databanks, in which data concerning recordings seldom retrieved can be filed.

 The system according to the invention can thus be designed such that the
25 central databank alone controls the loading of data concerning replayable contents into the local databanks.

 The local databank can additionally be connected to a loading station for reading- in pieces of music. The loading station can be a commercially available computer with a CD-ROM drive, which is connected to the local databank via a
30 preferably unidirectional data transmission line. Appropriate software is provided for creating the corresponding data and its integration into the inventory of the local databank. The additional data recorded locally can be backed up to the central data

bank under the control thereof or by the local databank

The local databank can furthermore be connected to an audio-visual playback station. In this way the client or customer is able to hear or be shown specific recordings which have particularly up-to-date contents or sales of which are being promoted, independently of the individual replay device.

The audiovisual playback station can be provided with an alphanumeric keyboard for control thereof. Instead of the alphanumeric keyboard, a touch screen, for example, can also be used.

An embodiment of a system according to the invention is shown schematically simplified in the drawing. The single drawing shows the design of a system for making pieces of music available to a user.

The system is shown connected to two CD sales racks 10, 10' belonging to a dealer. It includes a remote central databank 1 which is connected to a local databank 3 via an RDT/WAN connection 2, that is to say a remote data transfer or respectively wide-area network connection. Two peripheral devices 5, 5' are connected to the databank via standard network components 4, 4'. Two pairs of headphones 6 and respectively 6', and a barcode reader 7 and respectively 7' are connected to each peripheral device 5 and respectively 5'.

Ideally, all the pieces of music available in the shop are stored in digital form, as data, in the central databank 1, either completely or as extracts, not compressed or compressed.

The music titles on the CDs available from the dealer are read-in as data, for example, compressed in the MPEG2-layer-3 format, in the local databank 3. The pieces of music contained on a CD can be identified by means of the barcode on the package belonging to it, either directly by using the barcode or preferably by using auxiliary data which is filed in the system, most advantageously in the local databank 3, and contains a complete list of contents as well as, optionally, further specific information on the product represented by the respective barcode.

If a customer now wishes to hear a sample piece of music contained on a CD 11, 11' selected as an example, he puts on the headphones 6, 6' and holds the barcode on the CD package in front of the appropriate barcode reader 7, 7'. This initiates replay through the headphones 6, 6' of the music titles, or extracts thereof, contained

on this CD.

The response time between reading-in of the barcode and playing of the music title can be a few tenths of a second.

The barcode reader is, for example, an omni-directional, commercially
5 available, optical scanner.

The central databank 1 is generally a server, which can update the data inventory online to the local databank 3 according to need. Complete servicing and remote maintenance online is also possible through the operator of the central databank 1.

10 The peripheral devices 5, 5' include, in this example, no screen, keyboard, mouse, nor a hard disk. They need only contain the electronics and the software for operating the barcode readers 7, 7', and the headphones 6, 6', and can thus be configured such that they work in the local network without an operator. They have thus to be connected only once and switched on. The system is then automatically put
15 into operation.

The conversion of the scanned barcode into the names of the corresponding music extract data, the reading of the music extracts by the local databank, and decoding, processing of the compression format (for example, MP3/real audio), transfer of the data stream to the associated sound card driver, and so forth, can be
20 undertaken by media player software configured for the respective compression format being used, that is to say software written for this type of application.

Browsing, for example, for music, by hearing a sample, is simplified considerably by the system according to the invention.

When a plurality of input/output units are distributed on the CD shelf or
25 shelves, the dealer has the advantage that the risk of CDs being misplaced within the shop is reduced.

The system can furthermore be provided with a local loading station (not shown) for pieces of music. This is then equipped with appropriate software that selects, for example, 30 second extracts from individual pieces of music, converts
30 them into the appropriate format (for example MP3), and integrates them into the data archive of the local databank.

CLAIMS

1. A system for replay, in particular of extracts, of contents of audio or video recordings (11, 11'), the system comprising:
 - 5 a local databank (3) in which the replayable contents are stored as data, and can be addressed and managed according to the tracks of the recordings (11, 11');
at least one peripheral device (5, 5') which is connected on the one hand to the local databank (3) and on the other hand to at least one acoustic and/or optical visual replay means (6, 6'), and to a barcode reader (7, 7') assigned thereto; and
 - 10 a track management program which assigns a barcode, located on the package of the recording (11, 11') and which identifies said recording, to the corresponding data in the local databank (3), and after reading the barcode, controls the replay of the contents of this data via the replay means (6, 6');
characterised in that the local databank (3) is connected to a central databank
 - 15 (1), which supplies the data concerning the replayable contents to the local databank (3).
2. A system according to claim 1, characterised in that the central databank (1) alone controls the loading of the data concerning the replayable contents in the local
- 20 databank (3).
3. A system according to claim 1 or 2, characterised in that the local databank (3) is additionally connected to a loading station for reading-in pieces of music.
- 25 4. A system according to one of claims 1 to 3, characterised in that the local databank (3) is connected to an audio-visual playback station.
5. A system according to claim 4, characterised in that the audio-visual playback station has an alphanumeric keyboard.
- 30 6. A system for replaying contents of audio or video recordings substantially as described herein with reference to the accompanying drawings.



Application No: GB 0011553.5
Claims searched: All

Examiner: Donal Grace
Date of search: 29 November 2000

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): G5R (RAB, RAC, RAD)

Int Cl (Ed.7): G06F 17/60 G11B 27/00 H04H 1/02

Other: Online: WPI; EPODOC; JAPIO

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	EP 0817139 A2 (TOGNAZZINI) see col 1 ll 50-56	1 to 3
X	WO 99/08193 A1 (STERN)	1 to 5
X	WO 98/53566 A1 (SCIBORA et al)	1 to 5
X	WO 98/25364 A2 (SCIBORA et al)	1 to 3
X	FR 2739715 A1 (VINOT)	1 to 3
X	US 5237157 (KAPLAN)	1 to 3

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.